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APPROVAL OF UNDP ASSISTANCE TO A PROJECT OF NEPAL

IPF:(1992-96) $77 772 000

(NEP/92/001) - Kali Gandaki "A" Hydropower

Date of approval by the AC:[1]	21 October 1992
Expected duration:	18 months
Proposed executing agency:	Government (Nepal Electricity Authority (NEA))
Government implementing agency:	Asian Development Bank
Proposed UNDP contribution:	$ 2 000 000 Source of funds: IPF
Total UNDP budget:	$ 2 000 000

Project background

Nepal's human development index (HDI) is .168 giving Nepal a ranking of 140 out of 160 countries. One basic reason behind such a low level of human development is a small gross national product (GNP) per capita of (US)$180 in 1990. In the 1990s, the growth of the Nepalese economy will be constrained by the electricity supply shortages which are predicted to be 14 MW in 1992/93 rising to 250 MW by 1999/2000. The Nepal Electricity Authority (NEA) resorted to load shedding during March - June 1992. The Water and Energy Commission Secretariat (WECS) estimated that shortages of power would result in a loss of approximately (US)$224 million during the 1990s in the industry sector which is still at an early stage of development. The cost of not having early power supply arrangements would be enormous to the economy particularly with regard to employment creation.

An opportunity to improve this situation lies in harnessing the water resources which are abundant, i.e., 8.88 thousand cubic meters per capita annually and a hydropower potential of 83,000 MW. Nepal has developed only 0.28 percent of potential hydropower and consumes approximately 29 kwh per capita per year, one of the lowest in the world. Traditional biomass contributes 94.6 percent of energy consumption. Nepal spends about 30 percent of its export-earnings to import petroleum products. There is, thus, both great potential and a strong need to promote sustainable energy and economic growth.

In the "Approach Paper for the Eighth Plan (1992-97)", the Government has accorded high priority to supplying low cost hydropower, and if available, to exporting the surplus hydropower to India. Pending commissioning of the 201 MW Arun-3 facility which has been delayed until at least 2002/03, the Government has requested UNDP assistance to build the 100 MW Kali Gandaki "A" as a "fill-in" project that would be able to supply power from 1998. Nepal's programme to develop medium and large hydropower projects is governed by the "Least Cost Generation Expansion Plan (LCGEP)" which ranked Kali Gandaki "A" among the top alternatives.

Description of project

The concept of Kali Gandaki "A" is as follows: just 24 km off the existing highway, a 20 meter high dam will divert a flow of 100 cubic meters/second through a 6.1 km long tunnel in the same river basin to generate 100 MW, at a unit cost of less than 5.0 ¢/kwh.

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[1] **This Fact Sheet reflects the status of the project/revision at the time it was approved by the Action Committee; modifications to the project/revision may have occurred subsequently.**

The immediate objective of the project is to provide all technical documentation and tender documents necessary to carry out the construction and erection work so as to commission Kali Gandaki "A" by 1998. Project activities will include: (a) conducting hydraulic model tests; (b) detailing design drawings; (c) assessing environmental impact; (d) preparing tender drawings and documents; (e) evaluating bids for construction; and (f) completing the project report.

Inputs

UNDP will provide a subcontract to develop hydropower potential.

The Government will cover 212 work-months of professional support and other expenses.

Financial data

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Subcontract	2 000 000
Total	2 000 000

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